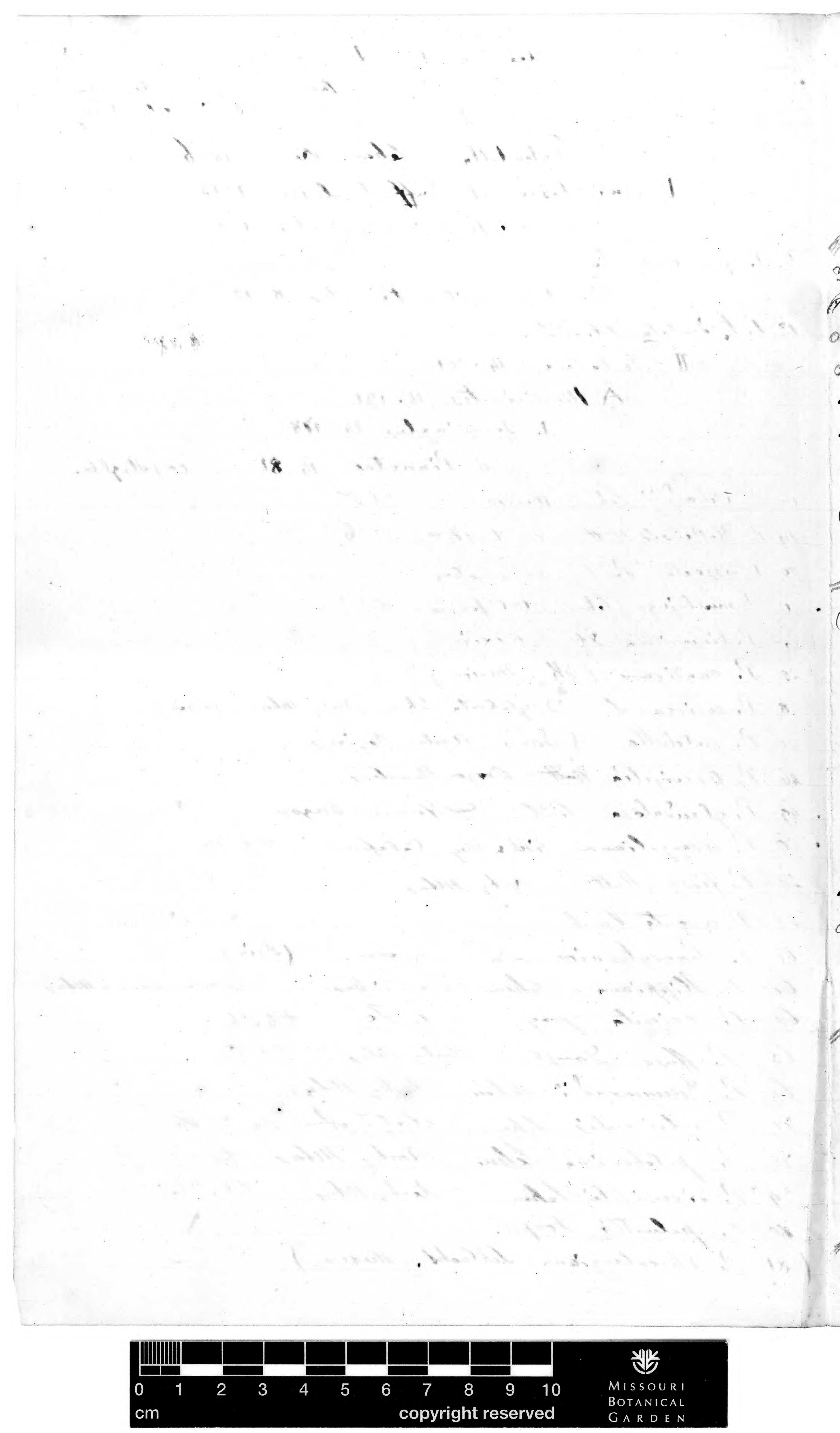


GEORGE ENGELMANN BOTANICAL NOTEBOOKS

Pagination Note:

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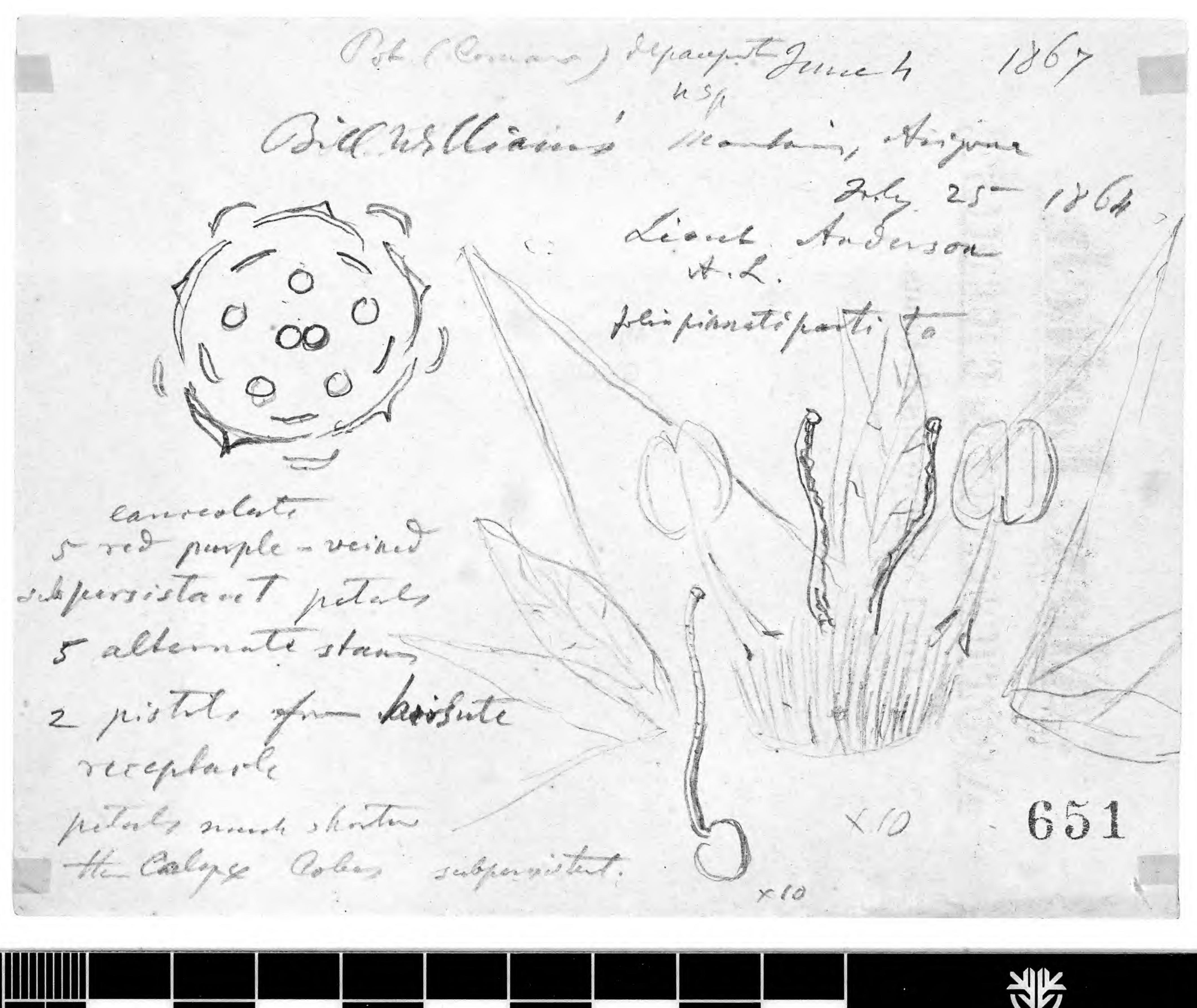
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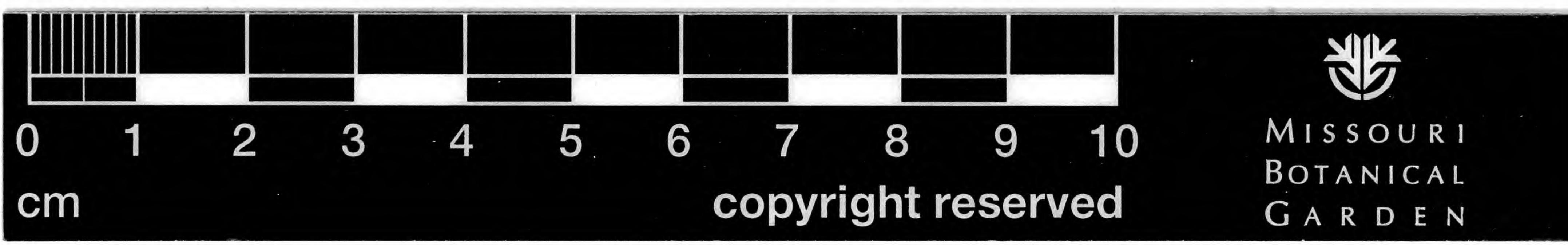
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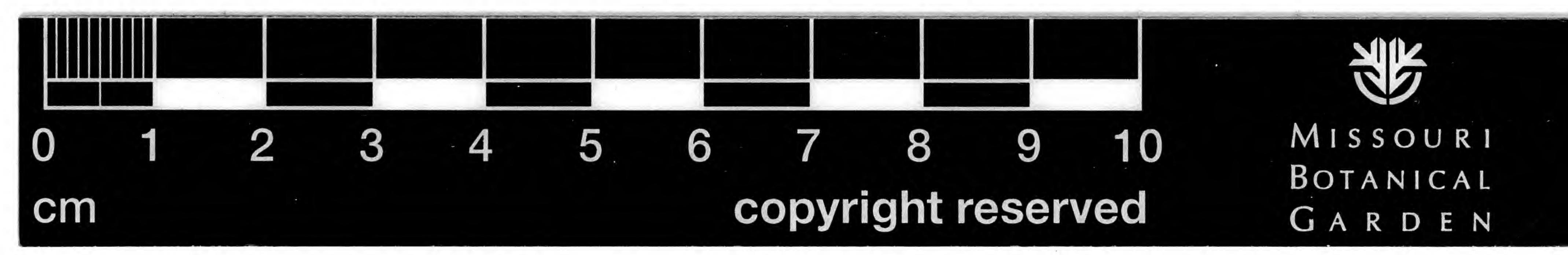
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# Editorial Bepartment.

### REVIEWS AND BIBLIOGRAPHICAL NOTICES.

### PAGET'S SURGICAL PATHOLOGY.

[Continued.]

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### 2.—Monthly Mean of Temperature, Fahrenheit.

#### JANUARY.

YEAR.	6 A. M.	9 A. M.	12 M.	3 P. M.	6 Р. м.	9 P. M	MEAN OF MONTH
1861	26.9	29.5	35.3	37.4	33.5	30.8	32.2
1862	27.1	27.3	30.1	30.7	29.5	28.5	28.9
1863					38.3	36.1	36.8
1864		25.2	32.6	35.1	31.5	28.0	29.2
1865	21.9	24.2	31.5	33.1	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		28.1
1866	27.0	29.1	34.8	36.8	33.8	31.5	32.2
Mean	26.2	28.2	33.9	35.7	32.8	30.5	31.2
	FEB	RUAR	Υ.	•	•		
1861	34.2	35.4	43.7	46.7	42.8	39.7	40.4
1862	23.9	27.0	33.6	35.9	31.9	29.2	30.2
1863	31.3	33.7	38.7	39.4	36 6	34.4	35.7
1864	30.4	34.4	42.2	45.5	40.9	36.4	38.3
1865	33.4	36.1	41.7	43.3	39.4	36.8	38.4
1866	27.3	30.0	37.0	38.7	35.2	32.5	33.4
Mean	30.1	32.8	39.5	41 6	37.8	34 8	26.1

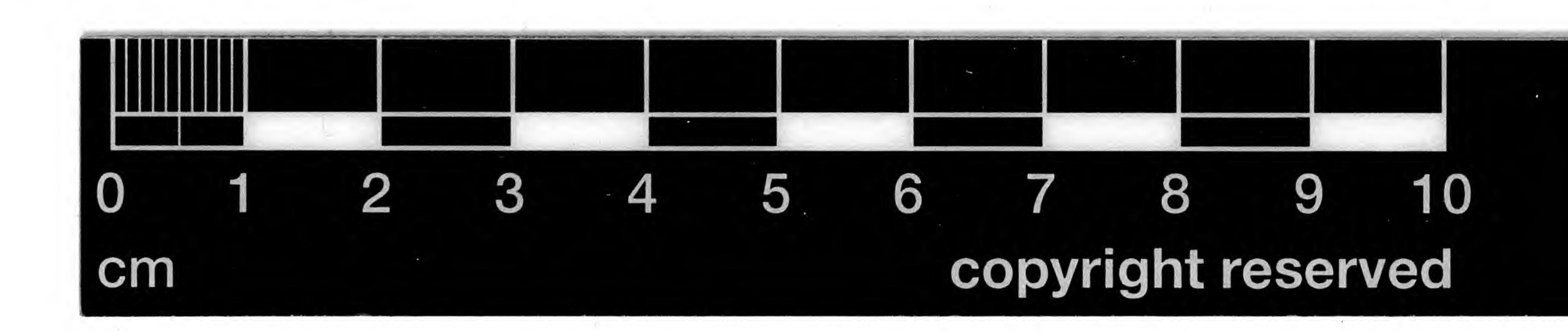
### 3.—Monthly Mean of Relative Humidity.

#### JANUARY

YEAR	6 A. M.	9 A. M.	12 m.	3 P. M.	6 P. M.	9 P. M.	MEAN OF MONTH
1861							72.2
1862	91.5	87.5	78.5	79.0	85.2	90.0	85.3
1862 1863	94.1	83.9	75.0	71.9	79.3	86.0	81.7
1864	90.8	79.3	65.9	62.7	75.4	79.8	75.6
1865 1866	89.3	77.5	64.3	62.8	73.7	79 9	74.6
1866	87.1	77.1	67.2	65.3	74.6	79.1	75.1
Mean	90.6	81.1	70.2	68.3	77.6	82.9	77.4
	FEB	RUAR	Y .				
1861	FEB	RUAR					63.8
1861 1862	FEB89.1	RUAR:	65.8	61.5	72.2	75.5	63.3
1861	FEB  89.1 94.1	RUAR 79.2 83.9	65.8 75.0	61.5 71.9	72.2 79.3	75.5 86.0	63.3 73.9 81.7
1861	FEB  89.1 94.1 79.0	RUARY 79.2 83.9 65.0	65.8 75.0 53.5	61.5 $71.9$ $49.0$	72.2 79.3 59.9	75.5 86.0 70.0	63.3 73.9 81.7 62.7
1861	FEB89.1 94.1 79.0 86.2	RUAR 79.2 83.9 65.0 73.8	65.8 75.0 53.5 63.7	61.5 $71.9$ $49.0$ $60.8$	72.2 79.3 59.9 70.8	75.5 $86.0$ $76.7$	63.3 $73.9$ $62.7$ $72.0$
1861	FEB 89.1 94.1 79.0 86.2 85.3	79.2 83.9 65.0 73.8 70.8	65.8 75.0 53.5 62.9	61.5 71.9 49.0 60.8 59.5	72.2 79.3 59.9 70.8 68.6	75.5 86.0 70.0 76.7 76.5	63.3 73.9 81.7 62.7 72.0 70.6

Errata. In the last No. of Journal, on page 70, line 6, for the word "destination" read declination.

MISSOURI BOTANICAL BARDEN GEORGE ENGELMANN PAPARA





# Editorial Department.

### REVIEWS AND BIBLIOGRAPHICAL NOTICES.

#### PAGET'S SURGICAL PATHOLOGY.

[Continued.]

Mr. Paget embraces in his theory the doctrine of complemental nutrition, first taught by C. F. Wolff, illustrating the subject as follows:

"A great change in nutrition rarely takes place in a single organ at a time; for example, the growth of the beard at the period of puberty in man, the growth and perfection of the plumage of the bird at breeding time; but as in man, when the development of the genital organs is prevented, that of the beard and all other external sexual characters-is, as a consequence, hindered, so in birds, when the breeding season ends, and the sexual organs pass gradually into their periodic atrophy, at once the plumage begins to assume the pale and more sober colors, which characterizes the barrenness of winter." He next refers to certain interesting specimens presented to the museum by Sir Philip Egerton, showing the interesting fact, "that if a buck be castrated while his antlers are still covered with velt, their growth is checked, they remain as if truncated, and irregular nodules of bone project from their urfaces." "The fact is not, hitherto, explained; it is inexplicable, by believing that the materials which, in the formation of these organs of external sexual character, are removed from the blood, leave or maintain the blood in the state necessary for the further development, growth and active function of the proper sexual or reproductive organs." "The concurrent development of the thymus gland and air breathing organs during the body's growth of the thyroid gland and the brain, (instances





### ELÆACRINUS KIRKWOODENSIS, n. sp.

Body very small, subglobose, a little longer than wide, flattened above and below. Basal pieces very gently concave, with their edges on a level with the plane of the under side. Radial pieces (fork pieces) reaching to the base and occupying more than four fifths the entire length of the body, narrow below and widest in the middle, sides gently arched. Interradial pieces subdeltoid, very prominent towards the apex, much longer than wide, obtusely angulated below, acutely angulated above, and notched on either side a short distance below the summit. Pseudo-ambulacral areas extending from base to summit, narrow, deeply impressed; sides nearly parallel; pore pieces amounting to about fifty in each field. A longitudinal fissure or slit extends from the central summit opening downwards, separating the pore pieces of one side from their fellows of the opposite for the distance of about one fifth the length of the field, thence their inner edges are united in the median line to the base. Pseudo-ambulacral spaces lanceolate, sloping gently from their edges to the sutures. Ovarial apertures eight, very minute, situated at the notches of the interradial plates. Anal opening large, circular or very slightly elliptical. The surface markings are not plainly exhibited in any of the specimens I have collected of this species. On several of them I observe, more or less distinctly, irregular coarse rugæ or pittings, which, however, may be due to weathering.

Dimensions.—Length, 0.20 of an inch; width, 0.18.

The *Elœacrinus Kirkwoodensis* is nearly allied to *E*. (*Pentremites*) melo, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

8

Witscours



## Topaz in Utah. By Henry Engelmann.

During my explorations in Utah as Geologist of the Expedition under Capt. J. H. Simpson, Top. Eng'rs. U. S. A., in 1858 and 1859, I observed some remarkably beautiful crystals of Topaz among some detritus of trachytic porphyry. They were perfectly colorless, transparent, sharply developed, and of great lustre. They were all short columnar. The largest of them measured scarcely one third of an inch in the direction of the basal cleavage, which was highly perfect. I observed ten modifications: all crystals exhibited (according to Prof. Rose's designation)

 $\infty \ c : b : a \ , \qquad \infty \ c : b : 2 \ a \ , \qquad c : \infty \ b : \infty \ a \ 1 \ , \\ 4 \ c : b : \infty \ a \ , \qquad 2 \ c : b : a \ ; \\ most of them also \qquad 2 \ c : b : \infty \ a \ , \qquad c : b : a \ ; \\ a \ few \ only \qquad 2 \ c : \infty \ b : a \ , \ and \ 4 \ (?) \ c : b : a \ .$ 

As in none of the crystals were both ends developed, I could not ascertain whether they were hemihedral, as is most common with topaz. The hardness of the mineral is =8. It is infusible before the blowpipe; and when strongly heat ed is coated with small blisters, but does not show any change of color. It exhibits the reactions of fluorine, alumina, and silex. No tests were made for other elements, nor were the crystals examined in regard to pyro-electricity and polarization of light. They exhibit double refraction quite plainly.

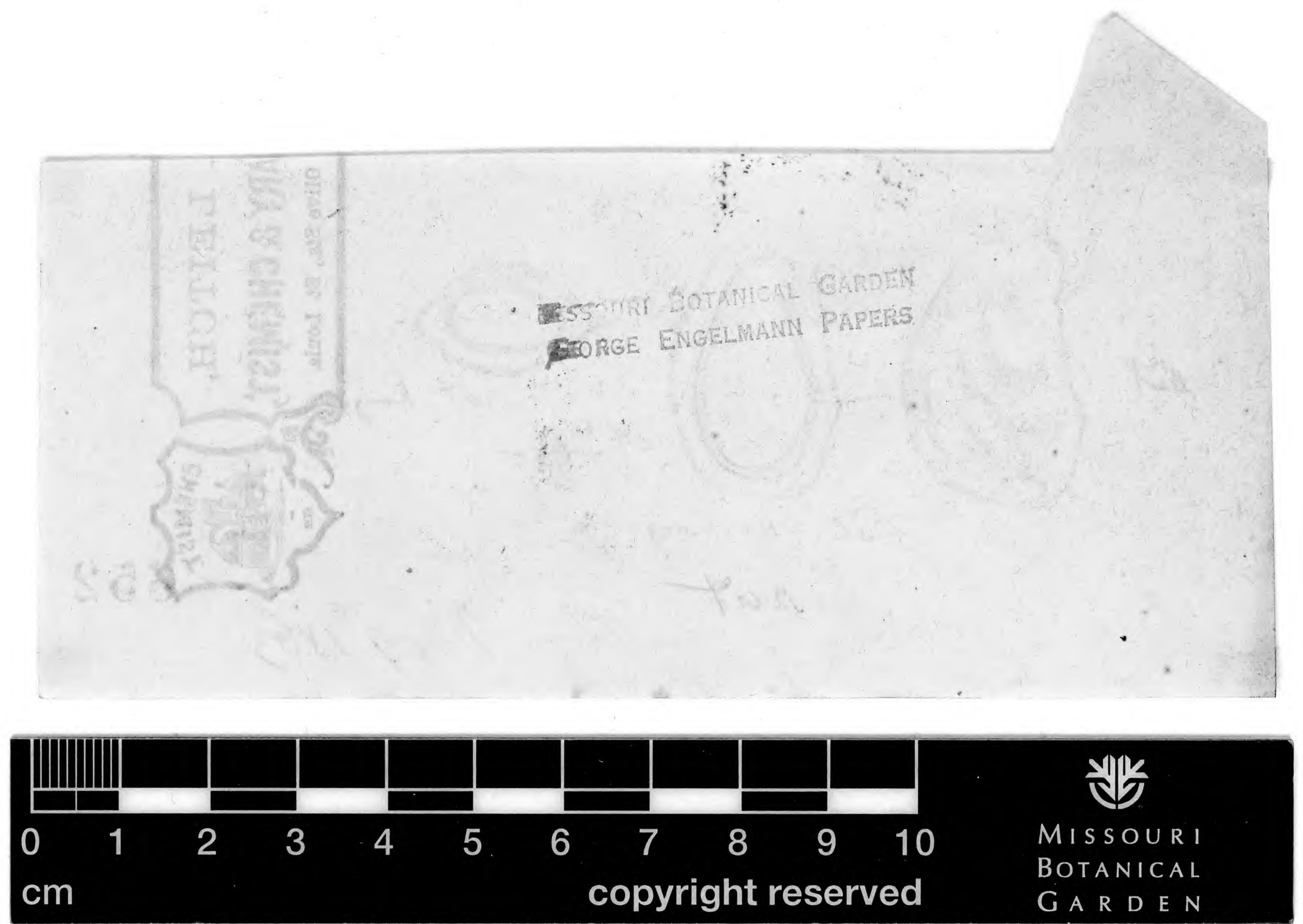
The locality of the mineral is near lat. 39° 40′, long. 113° 30′ west of Greenwich, west of south of Salt Lake, in Thomas' range of mountains, on Capt. Simpson's return trail. Circumstances prevented me from obtaining more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.









### SCIENTIFIC DEPARTMENT.

### 2.—Monthly Mean of Temperature, Fahrenheit.

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1864					31.5	28.0	29.2
1865	21.9	24.2	31.5	33.1	30.2	27.9	28.1
1866	27.0	29.1	34.8	36.8	33.8	31.5	
Mean	26.2	28.2	33.9	35.7	32.8	30.5	31.2
	FEB	RUAR	Υ.			1	1
1861		Harry T. Walter Co. Co.	43.7	46.7	42.8	39.7	40.4
1862		27.0	33.6	35.9	31.9	29.2	30.2
1863	31.3	33.7	38.7	39.4	36 6	34.4	35.7
1864	30.4	34.4	42.2	45.5	40.9	36.4	38.3
1865	33.4	36.1	41.7	43.3	39.4	36.8	38.4
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Mean	30.1	32.8	39.5	41.6	37.8	34.8	36.1

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1864	90.8	79.3	65.9	62.7	75.4	79.8	75.6
1865	89.3	77.5	64.3	62.8	73.7	79 9	74.6
1864		-			- 1		
Mean	90.6	81.1	70.2	68.3	77.6	82.9	77.4

### FEBRUARY.

1861	89.1 94.1 79.0	79.2 83.9 65.0	65.8 75.0 53.5	61.5 71.9 49.0	72.2 79.3 59.9	75.5 86.0 70.0	73.9 81.7 62.7
1866							72.0 70.6
Mean	86.8	74.5	64.2	60.5	70.2	76.9	70.7

Errata. In the last No. of Journal, on page 70, line 6, for the word "destination" read declination.

GEORGE ENGELMAN

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# Editorial Department.

## REVIEWS AND BIBLIOGRAPHICAL NOTICES.

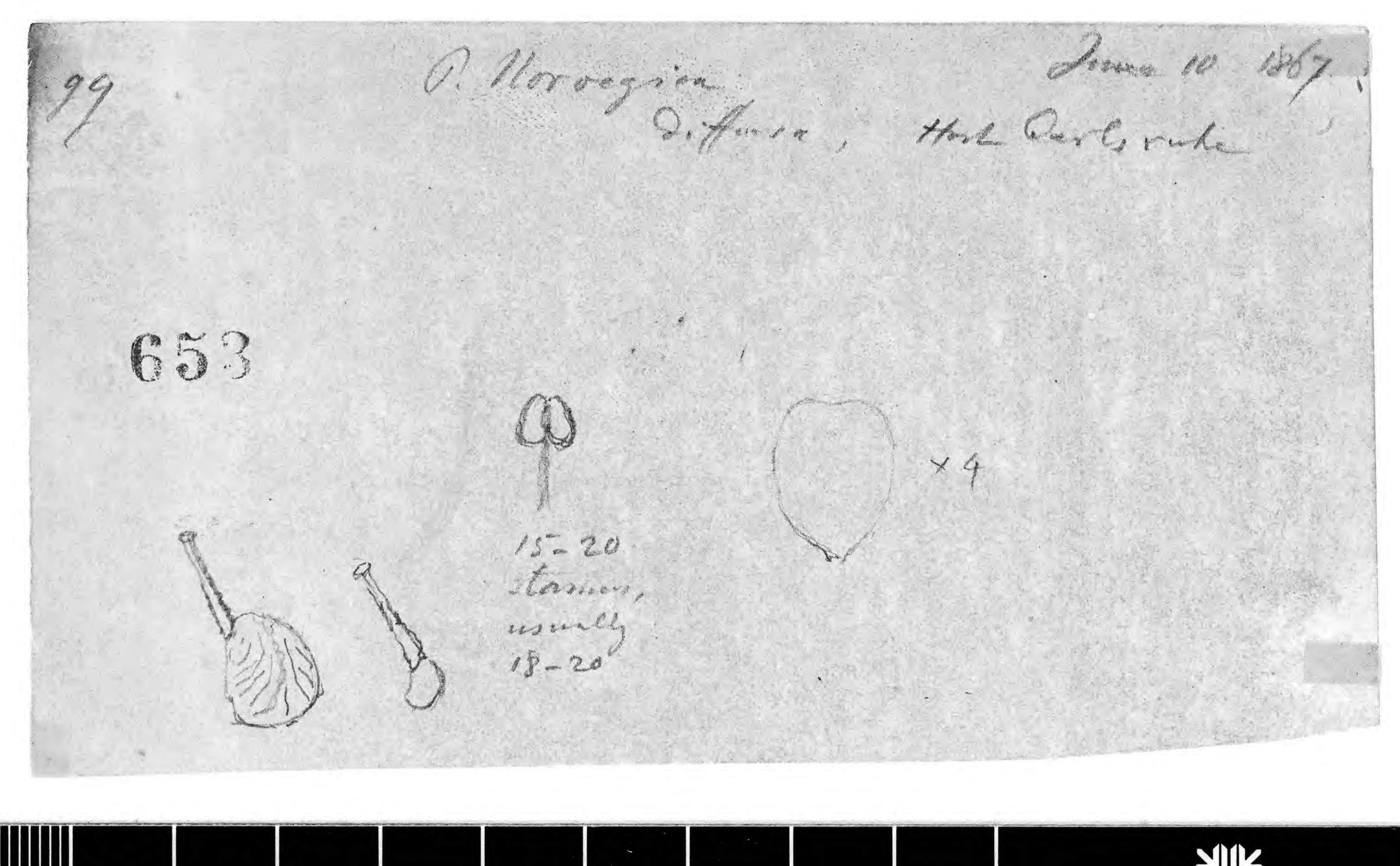
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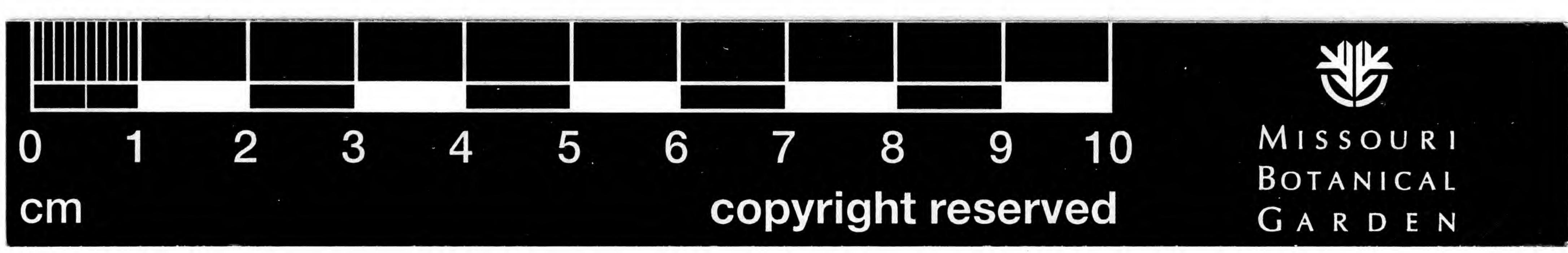
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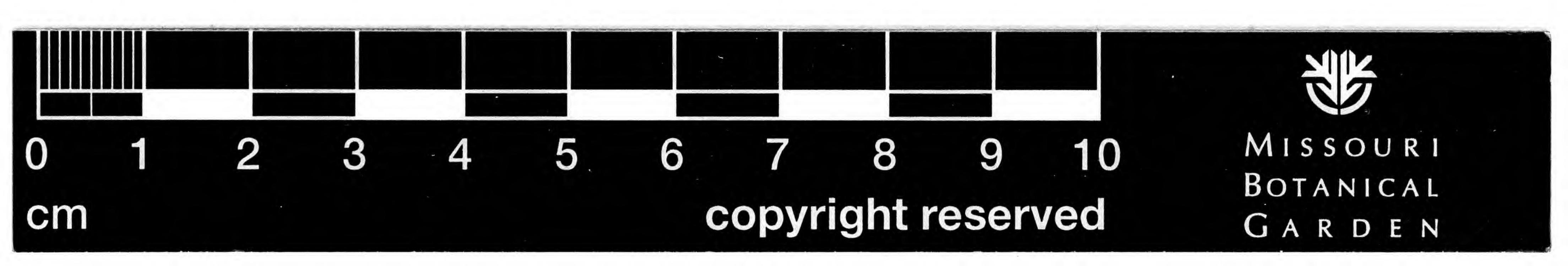
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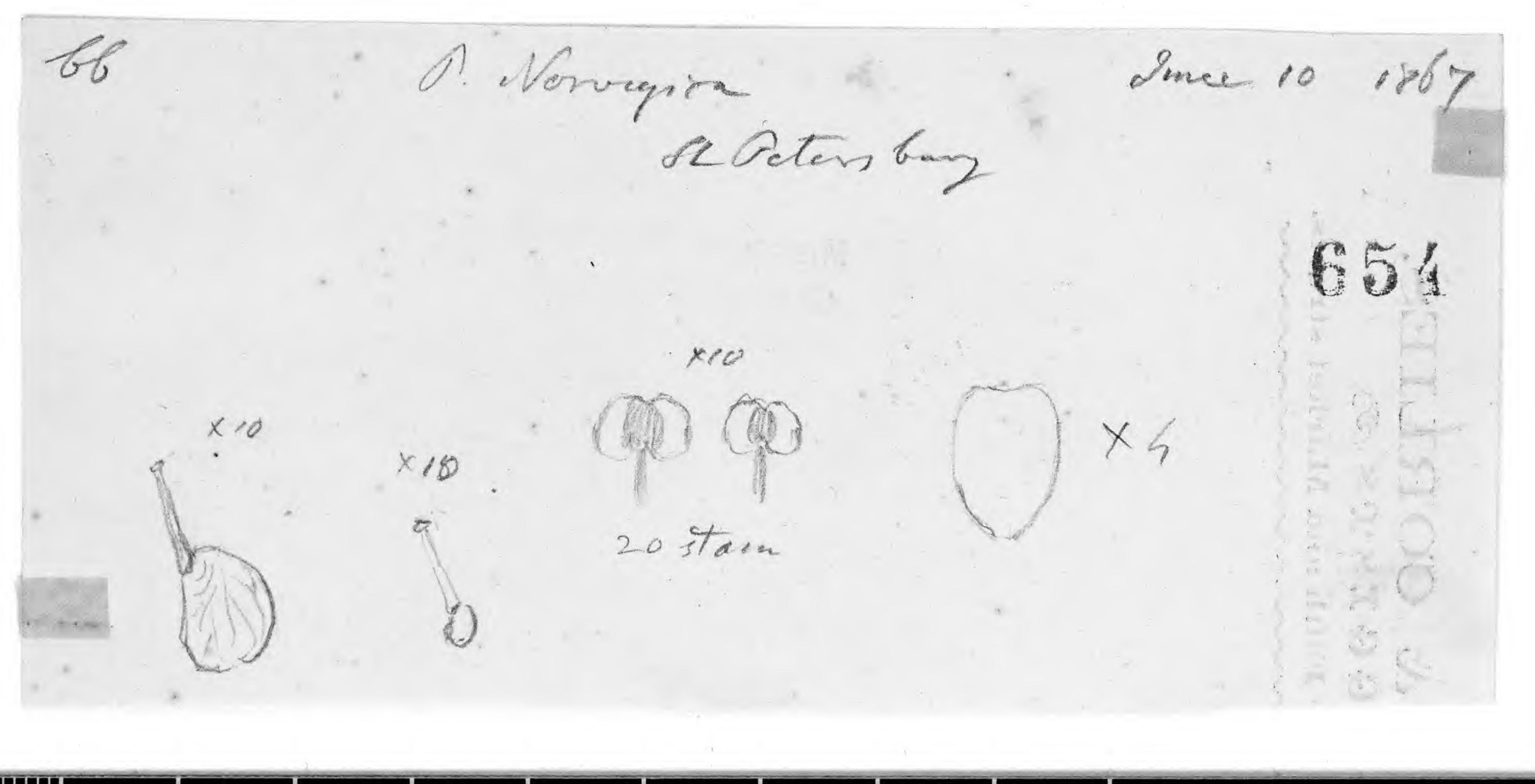






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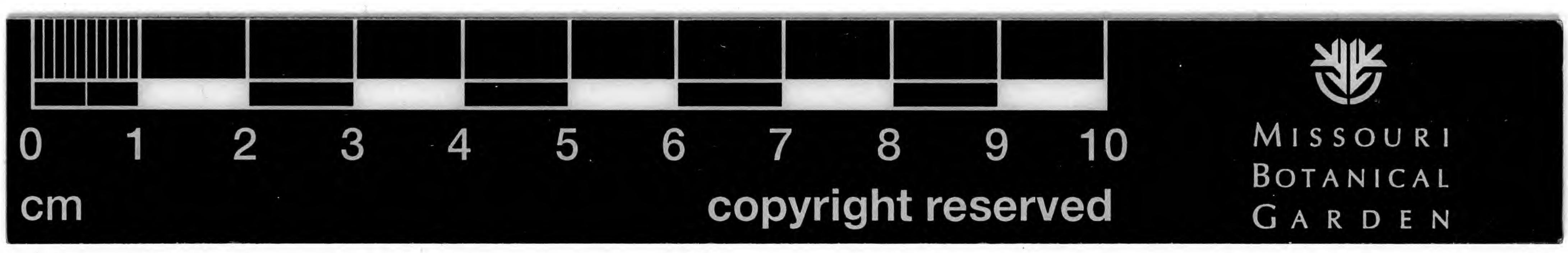


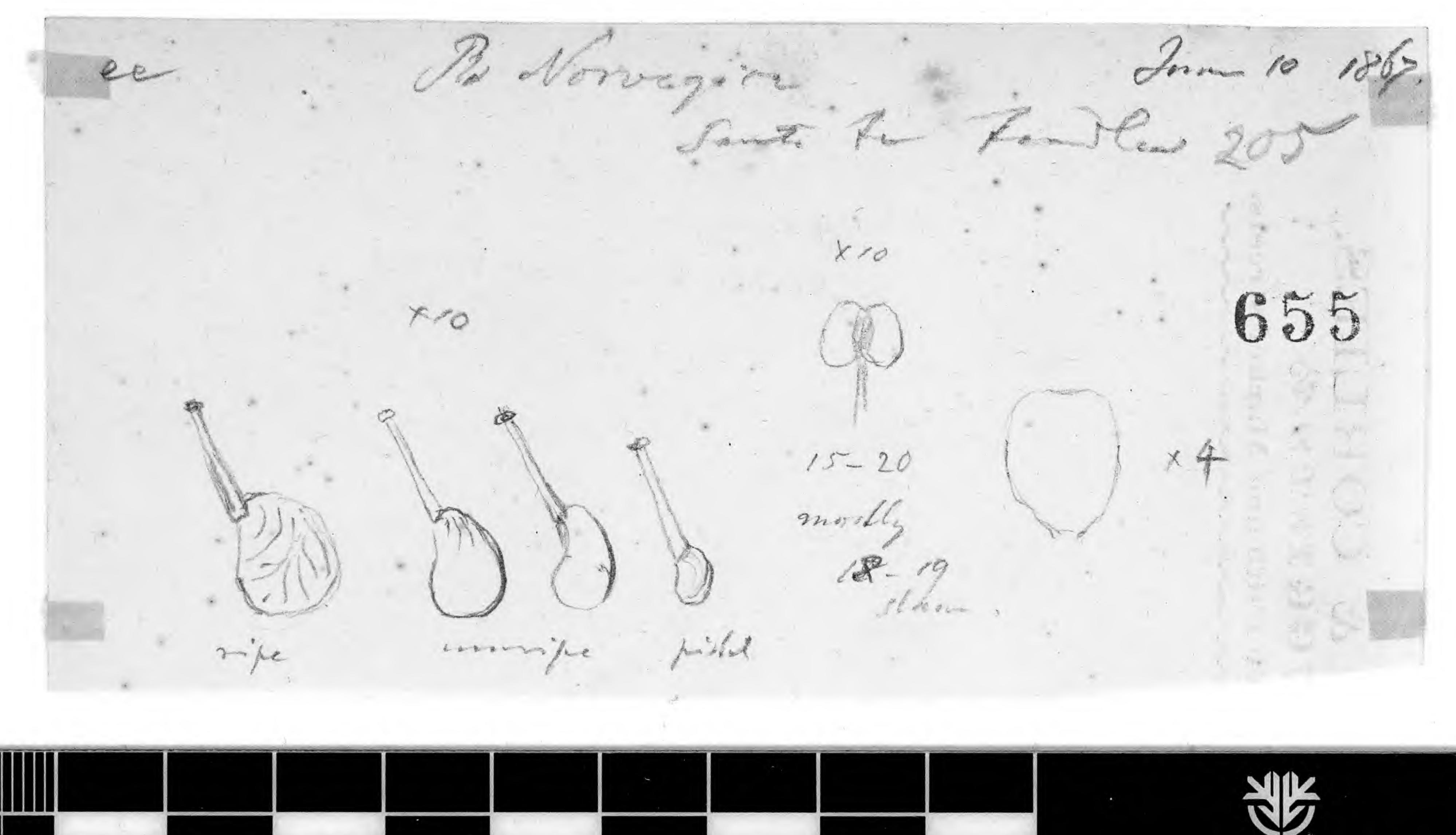






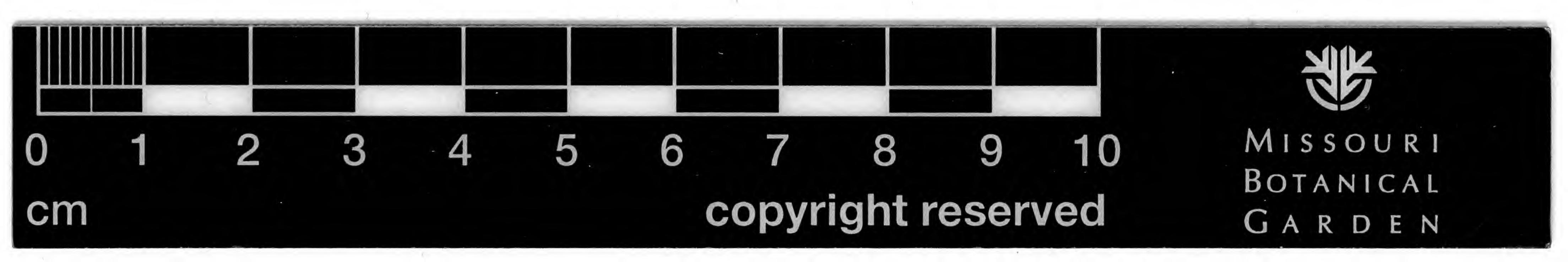
MISSOURI BOTANICAL GARDEN GEORGE ENGELMANN PAPERS

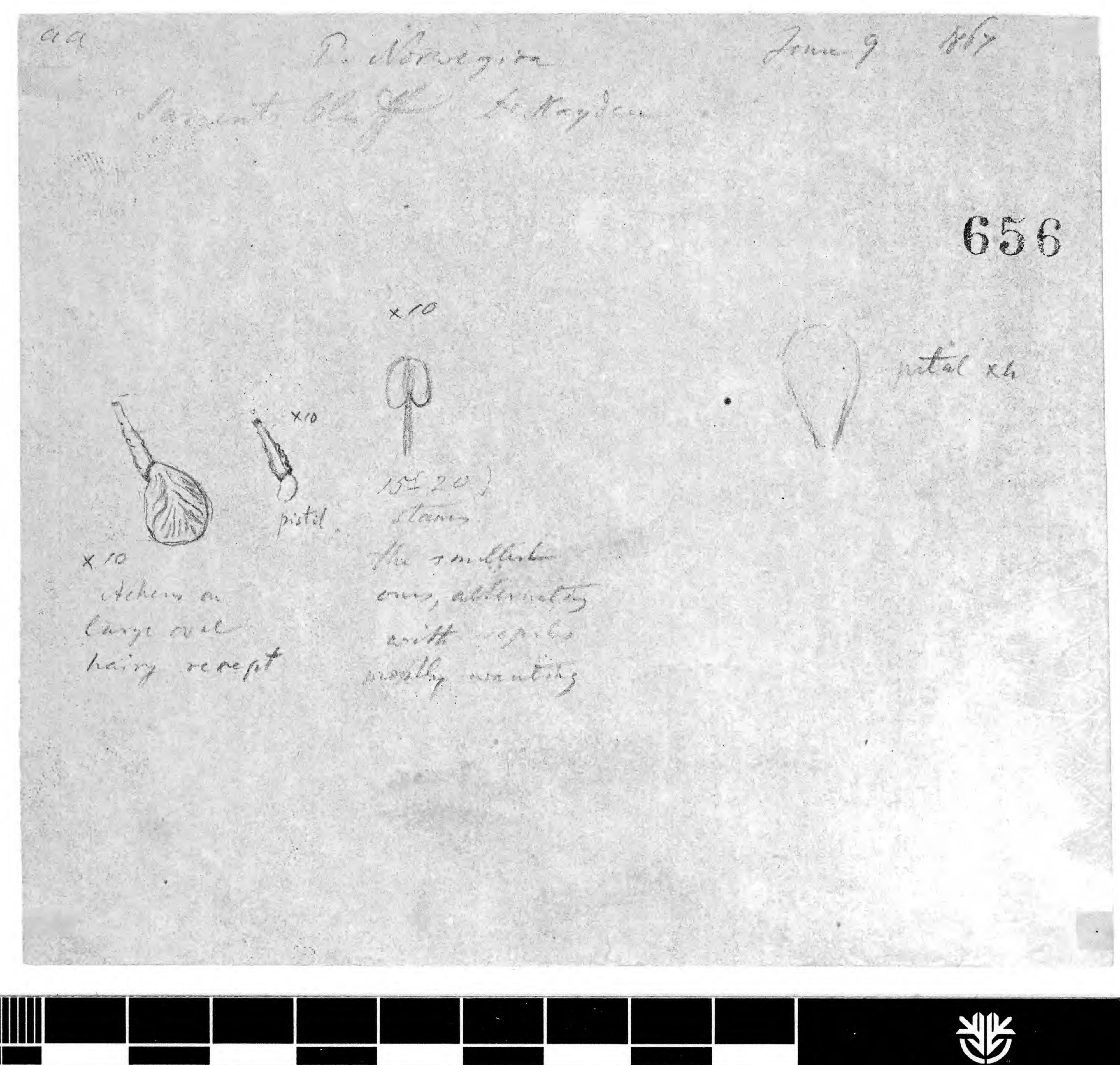


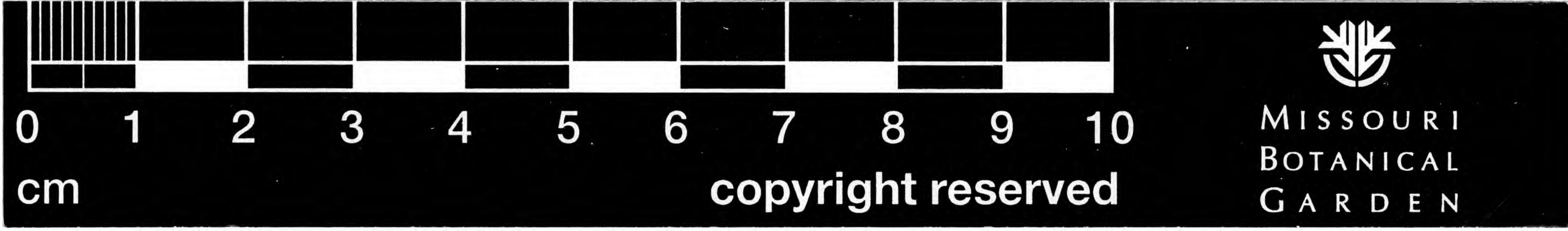




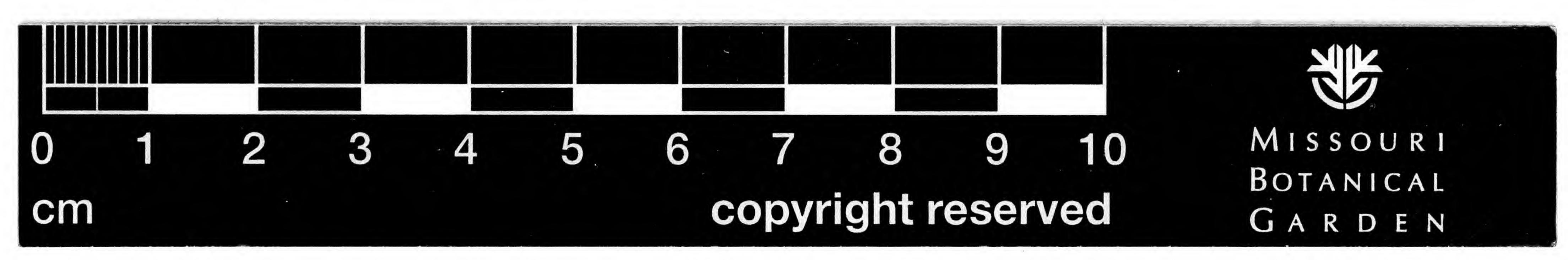
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